

vegetative and wildlife communities can be expected to have varied somewhat in composition and distribution in response to changes in environmental conditions, including the pressures exerted upon them by aboriginal population. Some of the conjectured shifts in ecological relationships would have, in turn, resulted in changing adaptations by resident human populations. Further treatment of this topic can be found in the following discussion of regional archaeology.

Archaeology

Currently recognized prehistoric sites in the Mid-Atlantic region represent a broad range of cultural expressions ranging from Paleo-Indian occupations (with an antiquity of perhaps 20,000 years) to those of the Late Woodland Period (which ends with European incursions in the 17th century). Intervening cultures including Archaic (comprising Early, Middle and Late phases) and Woodland (also comprising Early, Middle and Late expressions) are in evidence.

Throughout the region the traditional cultural-temporal sequence has been described, with variations, as follows: Paleo-Indian (12,000 B.C.- 7000 B.C.); Early Archaic (7000 B.C.- 6000 B.C.); Middle Archaic (6000 B.C.- 4000 B.C.); Late Archaic (4000 B.C. - 2000 B.C.); Terminal Archaic or Transitional (2000 B.C.- 1000 B.C.); Early Woodland (1000 B.C.- 500 B.C.); Middle Woodland (500 B.C. - A.D. 1000); and Late Woodland (A.D. 1000 - A.D. 1600). Because the physical traits and underlying cultural behaviors that archaeologists use to discriminate between cultural-temporal units frequently show continuities as well as distinctions, a variety of classificatory schemes have been developed over time. In addition, estimations of age for archaeological cultures continue to be refined. Since each cultural-temporal classification is an heuristic construct,

having no reality beyond its usefulness in science, each scheme is valid in its own frame of reference.

In Delaware, Custer (1984) has advocated a cultural temporal sequence that emphasizes the continuities and changes in environmental settings and their reflections in cultural-ecological adaptations through time. His sequence is as follows: Paleo-Indian (12,000 B.C.- 6500 B.C.); Archaic (6500 B.C.-3000 B.C.); Woodland I (3000 B.C.- A.D. 1000); and, Woodland II (A.D. 1000 - A.D. 1600). Custer's Woodland I period embraces elements traditionally included as traits of the Late Archaic through Middle Woodland periods. His Woodland II period is essentially equivalent to the traditional Late Woodland period. Readers will find reference to both classificatory schemes in the present report.

Most of the known archaeological sites of the prehistoric era occur on well drained ground near streams, springs or other bodies of water where hunting, fishing, or food collecting and processing could be profitably pursued, or where non-comestible resources could be procured and processed. Because of environmental changes -- brought about by natural processes or human agency -- present surface hydrology is not always an accurate indicator of site location. Most of the recognized sites appear to represent intermittent occupations oriented to specific tasks in a seasonal round. More permanently occupied locations were situated in locations that offered exceptionally rich ecological diversity or concentrated economic resources. In piedmont physiographic regions, the largest sites are situated around limestone sinkholes or on flats near springs or adjacent to the heads of actively running streams.

Archaeologists believe that the sites of aboriginal settlement served a variety of purposes necessary for the sustenance of life and that the functions performed at one site were related to those performed at others. Custer (1984)

has offered variations on a model of settlement systematics whose main dynamic force was the social regulation of population segments through a process of seasonal fissioning and aggregation. The elements of the general settlement scheme were macro-band base camps, micro-band base camps, and procurement camps.

The largest and most permanent settlements were macro-band base camps, situated in locations with sufficient resources to sustain relatively large groups of people (i.e. so-called macro-bands) for prolonged periods. Macro-band camps covered relatively large areas, perhaps 2½ acres (1 hectare) in extent. Such sites might contain hundreds or thousands of artifacts including utensils, tools, and weapons.

Micro-band base camps were settlements peopled by small groups (i.e., so-called micro-bands), fissioned off of the larger groups or macro-bands in pursuit of required resources that might be seasonally or opportunistically available. Micro-band camps might contain hundreds or tens of artifacts but with less frequency and variety than displayed at macro-band camps.

Procurement camps were ephemerally occupied by individuals or small groups as required to supplement stores of food or other raw materials. Such sites might contain only a few artifacts, including stone flakes, one or two bifaces, and possibly one or more ground stone tools. The assemblages revealed at procurement sites would be expected to occur in limited variety, with a focus to the exploitation of specific target resources.

The following pages offer a summary of archaeological sites identified in proximity to Valley Road. This summary derives from background research for the present work and from the writings of Jay Custer (1984) and others (Custer and Hodny 1989).

Three prehistoric sites had been previously identified by others in the Hockessin vicinity. These sites are the Mitchell Farm (7NC-A-2), the Hockessin Valley site (7NC-A-17), and an unnamed site (7NC-A-3). The Mitchell Farm (7NC-A-2) is located about 3/4 miles northwest of the village of Hockessin in the very headwaters of Mill Creek. The site, reported by Custer (1984), contains a variety of artifacts indicating use as a macro-band base camp during Late Archaic and Early Woodland (a.k.a. Woodland I) times and into the Late Woodland (a.k.a. Woodland II) period (Custer 1984:105, 136, 155). The assemblage includes stemmed and triangular bifaces, stone tools, and pottery.

The Hockessin Valley site (7NC-A-17) was discovered along Route 7 about ¼-mile southeast of the intersection with Valley Road (Custer and Hodny 1989). The site overlooks a wetland surrounding a headwater to Mill Creek. Archaeological excavations revealed eight truncated postmolds surrounding a stone hearth. The area circumscribed by the postmolds is reported as 25 square meters (269 s.f.); the surface area of the hearth is 2.25 square meters (24.2 s.f.). The authors conclude that the composite feature (including postmolds and hearth) was an aboriginal house. Analysis of charcoal from the hearth returned an age estimate of 5205 B.P.±70 radiocarbon years (3255 B.C.). The excavation yielded a meagre assortment of 279 non-diagnostic stone artifacts. About 85% of the artifacts (236/279) are flakes. Unfinished bifaces and fragments, totalling 13 specimens, are probably tools rather than weapons; however, one biface displayed tip fracture imputed to reflect use as a projectile point. Four cores were inferred to be parent material for flake tools. A rough stone hammer was also found. From the foregoing the authors adduce that the Hockessin Valley site (7NC-A-17) was a small base camp or procurement staging site.

The Delaware Bureau of Archaeology and Historic Preservation reports a prehistoric site (7NC-A-3) "located along Mill Creek behind the old school house." The prehistoric site lies on the east bank of a tributary to Mill Creek, opposite the old school. The "old school house" now houses the Lamborn Library, near the northern project terminus. The official record indicates that the prehistoric site was recorded in 1955. Surface-derived artifacts include 27 points, 22 potsherds, and a total of 70 other specimens, said to be "bifaces." No detail is given as to the typology of these bifaces.

The artifacts specifically identified as projectile points include: 16 narrow stemmed points (9 with contracting stems, 7 with square stems); 1 Fox Creek point; and 1 triangular point. The remaining nine projectile points are classified as "other."

The potsherds include: 3 Riggins Incised sherds; 2 Hell Island sherds (one each of corded and fabric-impressed varieties); and 1 Wolf Neck sherd. The remaining 16 potsherds are listed as "unidentifiable."

Apparently, all of the items in the inventory are surface finds. The record makes no mention of excavations or subterranean sampling. Thorough testing of this site during the present work confirms the lack of any cultural remains in undisturbed contexts. Based upon evidence now in hand, it would appear that this site was a small base camp, intermediate in size and complexity between the Mitchell Farm site (7NC-A-2) and the Hockessin Valley site (7NC-A-17).

Archaeological prospecting in the course of the current work led to the discovery of a previously unreported prehistoric site that overlooks a headwater of Mill Creek near the intersection of Valley Road and Evanson Road. This site yielded only a few stone flakes and a few sherds of late prehistoric pottery

reminiscent of the Riggins Fabric-Pressed or Minguannan types. All of the artifacts found at this site during the present investigation were confined to the plowzone.

Historical Summary

In 1699 William Penn had surveyed two parcels of land, of roughly 15,000 acres each, for his two children, William Jr. and Letitia Penn. Letitia's portion included what is now northern Mill Creek Hundred, and part of southern Chester County, Pennsylvania. This parcel was known as Stenning Manor, but was never developed by Letitia. In 1713, pressure from squatters resulted in the Manor being divided and sold in large lots during the next quarter of the century (Kise, Franks and Straw 1991:2; Lake 1976:20).

The partition and sale of Stenning Manor attracted many of the first settlers to the area. Between 1720-1770 the dominant immigrant groups were Scotch-Irish and English Quakers. The Scotch-Irish were mostly of the middle and lower middle classes. These people were largely destitute, and perhaps as many as half entered the colony as indentured servants. The English Quakers were usually better off financially. This group were often second and third sons of landed English gentry and were in a better position to invest money in land (Lake 1976:18).

Simon Hadley II, his wife, Ruth, and six children, Quakers from King's County, Ireland, came to Delaware in 1712. They purchased 1,200 acres of Stenning Manor. After Hadley was killed by a servant in 1756, much of his property was sold, particularly to members of the Springer family (Lake 1976:20-21).

The Springer family, being of Swedish decent, had originally been attracted to the Swedish settlement in New Castle, Delaware. In 1729, Charles Springer became the first in the family to buy property in Mill Creek Hundred. By 1785, His brother, Nicholas, had purchased all of the former Hadley land east of Limestone Road, from the Pennsylvania border to Valley Road. Part of this land had belonged to one John Dixon. Dixon's son, John, had established a 265 acre homestead on Valley Road. The original house, although much altered, still stands at 730 Valley Road (Lake 1976:23).

By 1800 all the lands belonging to the Hadley family had been sold, and their name disappears from the area. The Dixon and Springer families were also of short duration. Early maps dating from 1820, 1849, and 1868 show that the Dixon and Springer holdings were gradually purchased by members of the Wilson family. This large Quaker family bought the Dixon farmstead in 1869. It later became known as Willowgrove (Lake 1976:26).

In 1771 James Jackson purchased two adjoining parcels of land from John Dixon. These parcels totaled 250 acres. A descendant of James Jackson, State Senator John G. Jackson, was to have considerable influence in the Hockessin area in the mid 1880s (Lake 1976:26,29).

During this early period of settlement, the economic focus in the Hockessin area was mainly on agriculture and milling (Kise, Franks and Straw 1991:3). Since most of the families were Quakers, the town of Hockessin grew up around the Friend's Meeting House. The Meeting House was built in 1783 along Old Wilmington Road, one of the few primary roads in the area. Another important primary road was "Limerock", or Limestone Road, which roughly paralleled Old Wilmington Road further to the west. These two primary roads were located on high ground following the trend of streams flowing through the region. Valley

Road appears on a map by 1823, serving as a connecting road between these two early primary routes (Lake 1976:35-37). Tweed's Tavern, one of the few taverns along Limestone Road, was situated at the intersection of Limestone and Valley Roads (Kise, Franks and Straw 1991:2). Recent renovations of that property, now known as the Duthrie-Giacomelli House, exposed remains of three log walls in the old part of the house (Bureau of Archaeology and Historic Preservation Micro Fiche Files 1973:N-1101). This structure also appears on late 19th century maps of the region and is identified as belonging to T.L.G. Baldwin (Beers 1868, Hopkins 1881).

In 1820, the discovery of kaolin deposits in southeastern Pennsylvania and subsequently in northern Delaware, changed the primary economic focus of the region from agriculture to mining. Israel Hoopes and a field-hand named, Thomas, were digging post holes on their farm near the former hamlet of Buenos Aires, Chester County Pennsylvania. At a depth of two feet they hit a white clay deposit. Results from analysis at the assayer's office showed this deposit to contain 48% silica, 37% aluminum, 13% water and 2% other impurities. In composition, this clay resembled kaolin ($H_4 Al_2 Si_2 O_9$), which was valuable for the production of porcelain and other ceramic products.

Upon finding deposits of kaolin, Hoopes and his neighbors abandoned farming and began mining. Recognizing the economic value of the white clay, residents soon afterwards changed their village name from Buenos Aires to Kaolin.

In the early days, kaolin mining was labor intensive, markets were limited, roads were poor, and shipment from Newport, Delaware was costly. In addition, the practice of open-pit mining was dangerous and destroyed valuable farmland. These limitations restricted the early commercial exploitation of kaolin.

However, the leasing of land to investors yielded royalties to local residents (Lake 1976:96).

Local inhabitants did not profit from the kaolin industry as much as the investors, such as Israel Lacey, James Burgess, and Moses Golding (Lake 1976:96). Some local inhabitants, including Josiah and Ephraim Wilson and James Jackson, became involved with the prospecting investors. In 1869 Israel Lacey purchased tracts from both James Jackson and Josiah Wilson. Lacey also obtained a 5-year lease on Ephraim Wilson's farmstead. The agreement stated that Lacey could extract up to 3,000 tons of kaolin and other minerals per year from Ephraim's land. Should more than this amount be extracted, the Wilson family was to receive a payment of fifty cents per ton on the balance. At the end of the lease, Lacey was to restore the lands in good order (Lake 1976:94).

In October of 1881, Israel Lacey sold his interests in the valley to James Burgess. Burgess was an innovative man and developed a system of shaft mining. "Six by six inch wooden beams . . . about ten feet in length were placed around a hole to form an octagonal shaft thirty feet across. The beams were fastened together with wooden pegs . . . as the shaft was dug deeper . . . men would enter the hole and insert an additional rim of beams" (Lake 1976:94). These shafts would reach depths of 50 to 120 feet below the surface. Often shafts were placed right next to each other. Golding observed Burgess's method and modified it by eliminating the use of pegs. Golding secured a patent on this method of shoring (Lake 1976:94).

Competition was fierce. Often investors not only stole each other's ideas, but worked side by side in deep shafts separated only by imaginary boundary lines. Impetus came from a growing pottery manufacturing industry in New Jersey and Ohio, as well as from improved transportation in the form of railroads, such

as the Wilmington and Western Railroad (formed in 1872). By 1875, Hockessin had a single industry: kaolin mining. Virtually every able-bodied, man, woman, and child sought employment in the mines (Lake 1976:144).

The kaolin industry swelled the population of Hockessin and made necessary the establishment of more schools. The Lamborn Library, located at Valley Road and Old Lancaster Pike, was originally erected as a one-room school. Built in 1870, the school measured approximately 36 by 29 feet. The stone foundation walls were 20 inches thick, enveloping a basement floor several feet below grade. In 1890, a second floor, built of brick, was added. An eight-foot extension was added to the west end of the building. This addition enclosed the stairway and created an open, brick-arched portico that still shelters the original doorway of the old school house. While the building served as a school, it also had a small bell tower piercing the roof-line. In recent years, the building has served as a library and is now listed upon the National Register of Historic Places (Bureau of Archaeology and Historic Preservation 1973;micro-fiche N3863).

By 1904, the kaolin industry had reached its apex. After fire destroyed the Golding works in 1943, the kaolin industry disappeared from the Hockessin Valley (Lake 1976:96).

Beginning in the mid-19th century, other notable residents established businesses based on the mining of limestone. Among these was John G. Jackson, born in 1818. In addition to industry and commerce, Jackson had other interests including mathematics, astronomy, and philosophy.

In 1842 Jackson opened the Jackson limestone kilns in the south meadow of the family farm. The location of his operations was south of Valley Road and connected to it by what is today, Evanson Road (Baist 1893).

At the time, limestone was mostly used to improve local roads, as a building material, and for tombstones. Jackson's quarry did not produce pure limestone but rather a metamorphosed granite, which proved to be a better material for building and tombstones. He even offered a sample of his stone for the proposed Washington Monument (Lake 1976:161).

The quarry and kiln were financially successful. Jackson also engaged in supplying lumber for the building of railroad cars and willow logs for the Du Pont Powder Mills along the Brandywine. The willow was converted to charcoal, necessary for the production of black powder. Both the quarrying of limestone and the gathering of large willow limbs along Mill Creek continued throughout the Civil War Period.

With wealth from his various enterprises, Jackson built a stone house "*. . . on high ground at the south meadow on Valley Road. On the other side of the road he also erected a beautiful red barn, with all the gingerbread trim of that day*" (Lake 1976:161).

Jackson moved on to a career in politics. In 1864 he was elected to the State Legislature on the Republican ticket (Lake 1976:162).

During 1871-1872, Jackson was the chief construction engineer for the Wilmington and Western Railroad, which he also helped to organize and finance (Lake 1976:162). Local farmers and industrialists hoped this new line would connect them with western markets. Caught in the economic crash of 1883 (Hoffecker 1973:171), and with other problems, the line never reached beyond Landenberg, Pennsylvania, about five miles west of Hockessin (Williams 1985:73). It remained a minor road largely dependent on the limestone shipments from the Red Clay Creek (Hoffecker 1973:171) and Mill Creek valleys.

Jackson eventually retired from his profitable limestone operation in 1880. He then built a "semi-retirement" home called Sunset Cottage located on the northeastern corner of Southwood and Valley Roads. The third floor of Sunset Cottage consisted of a tower that was in actuality an astronomical observatory that could be positioned by means of a hand-turned crank (Bureau of Archaeological and Historic Preservation 1973: microfiche N 10-178). After Jackson died in 1897, Sunset Cottage burned and was later rebuilt without the third floor observatory (Lake 1976:159, 161). This house has been found eligible for the National Register (Kise, Franks and Straw 1991:Figure 7).

The need for stone masons and laborers in the limestone industry attracted a new group of immigrants to the Hockessin area. These immigrants, largely Italians, were recruited to work in the stone quarries almost as soon as they landed on Ellis Island in New York Harbor (Lake 1976:188-189). As the need for limestone continued to grow -- especially in the building of Delaware's roads between 1920-1930 --, these newcomers remained in the Hockessin area (Lake 1976:188-189).

Having settled in the region, Italians were responsible for the development of the local mushroom industry. In 1895, a Kennett Square farmer imported a jar of "brick spawn" mushrooms from England. Soon people in southern Chester County Pennsylvania were growing mushrooms anywhere they could: in cellars, poultry houses and abandoned barns (Lake 1976:185).

Soon the mushroom industry flowed over the Pennsylvania border into northern Delaware. In 1910, Merit Dixon, a railroad station agent in Hockessin built a mushroom house out of terra-cotta brick. Brick, or stone mushroom houses, allowed for better temperature control than frame structures. Temperature regulation is critical for the survival of mushroom spores that grow

in absolute darkness at a temperature between 50-65 degrees. Prior to using masonry construction for mushroom houses, production had been limited to only spring and fall growing seasons. Entrepreneurs Nixon and James Miles, used abandoned fire-brick works in Southwood for their mushroom business. This enterprise kept the railroad active to Southwood until 1957, long after it had ceased service to Landenberg (Lake 1976:186).

After 1910, mushroom production doubled about every two years. The innovation of growing the spores on composted manure from stock yards near Lancaster, Pennsylvania and the introduction of air-conditioning about 1930, meant that a new crop could be produced every ten weeks (Lake 1976:186). Soon there were several canneries that processed mushrooms for commercial sale. The canning of mushrooms led to the canning of truck crops as well. The canning industry survives to the present in the region.

The present landscape -- studded with residential developments and shopping centers -- reflects ongoing changes from a former agrarian and industrial economy to one based on commercial enterprises in the growing suburbs of Philadelphia and Wilmington.

Survey Results

This survey combined elements of both Phase I and Phase II investigations. The entire project alignment has been investigated at the Phase I level of survey. Four locations were investigated at the Phase II level. The accompanying map indicates the site locations (Fig. 3). A provenience-keyed artifact inventory is appended.

The four sites that were identified and investigated in detail include both prehistoric and historic-era remains. The sites include the Springer House (7NC-A-80), the Thompson House (7NC-A-82), Site 7NC-A-3 (Locus B), and the Wingwall/Stone Barn Site (7NC-A-81). The following table summarizes the finds at these locations:

Site	Artifacts from Test Units (1± s.f.)		Artifacts from Excavation Units (12.5 - 25.0 s.f.)		Total Artifacts
	Aboriginal	Historic	Aboriginal	Historic	
Springer	3	29	33	345	410
Thompson	5	30	16	8	59
7NC-A-3(B)	9	2	0	0	11
Wing Wall	0	0	0	17	17
Total Artifacts	17	61	49	370	497

The sites are listed and briefly described below. In the following descriptions are given the site name and/or designation, references to project plan (by Sheet and Station Numbers), and property ownership as listed at the time of the survey.

1) Springer House: Site 7NC-A-80 (prehistoric/historic)

Project Plan: Sheet 6

Location: Northwest side of Valley Road at Station Number 42-43

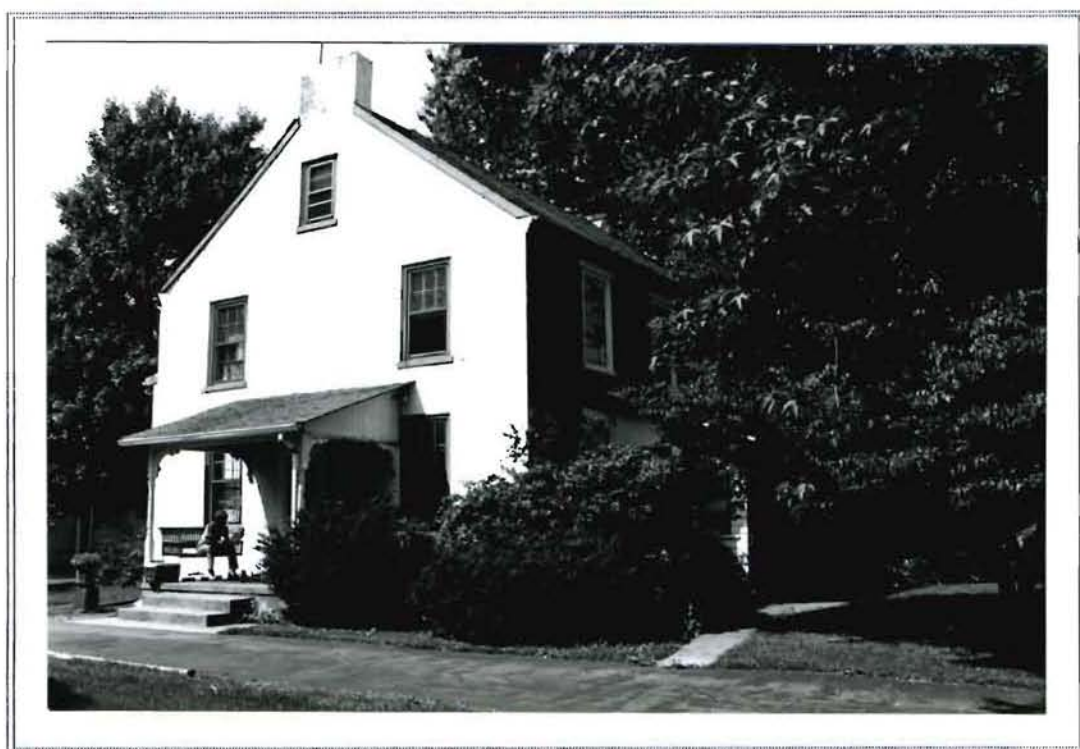
Owner: Valley Road Partnership

On this lot is a house built by George Springer in 1852, with additions constructed in the late 19th and 20th centuries. Sixteen (16) posthole tests were placed in the yard and grounds. This testing yielded three (3) prehistoric artifacts, and 29 historic-era artifacts. Three (3) larger units (2½ x 5 feet) were placed as follows: adjacent to the late 19th century addition; adjacent to the original structure; and, in the rear yard. The deployment of units is depicted in Figure 5. These excavation units yielded 33 prehistoric artifacts and 345 historic-era artifacts. The total recovery is 410 pieces.

The aboriginal artifacts from post-hole testing include one reduction fragment, one flake, and one biface fragment, all rendered in quartz. Excavation Unit 2 yielded 2 quartz flake fragments. Excavation Unit 3 produced an early-stage biface fragment, 3 primary flakes, 3 thinning flake fragments, 1 late-stage flake, 11 flake fragments, and 2 reduction fragments. All of the foregoing and one thermally-altered piece are of quartz. Two jasper artifacts were found in this unit. One is the basal ear or tang of a biface fragment, judged to be a triangle from its form. The other is a thinning flake fragment. Primary flake fragments were found, one each of felsite and quartzite.

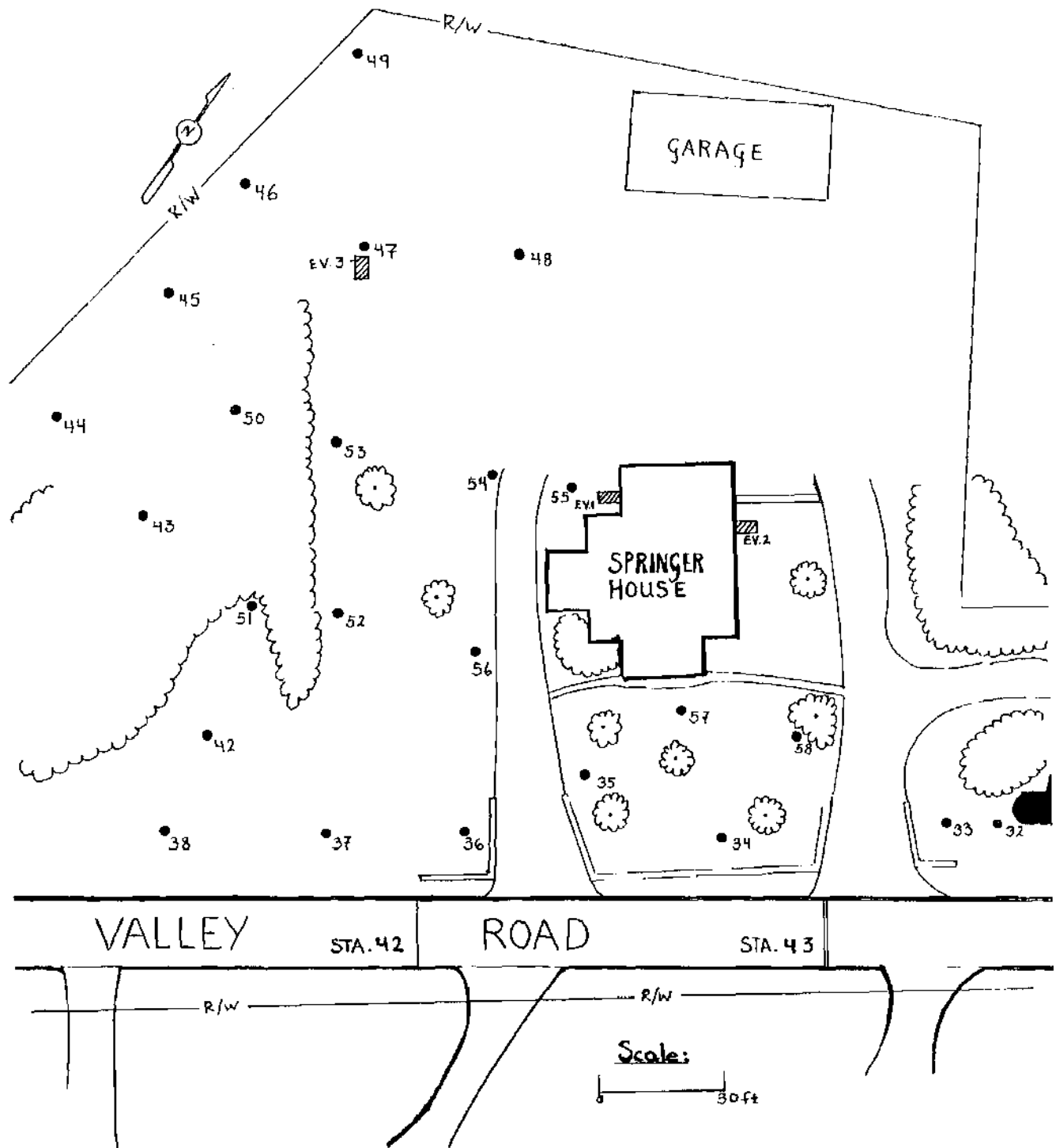
The mundane and fragmentary character of the finds militates against cultural-temporal identifications. The jasper specimens may be of late prehistoric origin (ca. A.D. 1000), as gauged by form and material. The rest remain problematical; however, a Late Archaic/Early Woodland assignment (ca. 1000 B.C.) would not be troublesome.

Plate 5: Springer House



Looking North

Figure 5: Plan of Testing at 7NC-A-80



The prehistoric cultural remains just described were found in a field to the southwest side of the house. Field observations demonstrate that the artifacts reside in a fill deposit. Accordingly, the prehistoric component at this site requires no additional attention.

Investigations revealed plowed ground; also ground that was both filled and plowed. The original portion of the dwelling has a minuscule builders' trench, too small to reveal information concerning original construction. The late 19th century addition has a larger builders' trench containing artifacts of the period, including an 1880 Indian head penny. See the artifact inventory in Appendix II for a complete listing. Soil profiles in the rear yard show one or two episodes of fill between the west side of the house and the stream channel to the west.

Cultural material related to the original occupation of the house may exist in the crawlspace beneath the rear (late 19th century) addition floor. Evidence may also be found in the dirt floor of the basement. These locations cannot be investigated by conventional techniques while the house is occupied. Investigation of these areas after evacuation of the tenants, but before demolition of the structure, is strongly recommended.

2) Wingwall/Stone Barn: Site 7NC-A-81 (historic)

Project Plan: Sheet 9
Location: Station Number 65
Owner: Blackburn

Evidence of a stone barn in this location exists in a remaining wingwall adjacent to Valley Road, and in large, clustered rocks visible on the ground surface. A local resident recalled the barn in ruinous condition in the 1930's

and 1940's. The date of construction and original dimensions are not known. The barn was demolished in the 1940's.

The barn apparently sat 20 feet or so from the southeastern side of Valley Road. Next to the road is a stone wingwall, that rises about five feet above the road surface. According to a local resident, this wall retained an earthen ramp between the road and the proximal barn wall. This ramp provided access for loading or unloading cargo directly into the second story of the barn. The first story, at ground level, housed livestock.

Five (5) posthole shovel tests were opened in this location, as well as an exploratory cut that measured approximately 3 x 5 feet. Posthole shovel tests detected nothing but building rubble. The larger cut revealed a toppled wall section remaining from demolition. Prospecting with a metal detector revealed a few pieces of agricultural hardware (pitchfork and shovel fragments, plowshare, etc.), thus confirming the indicated use. See the artifact inventory in Appendix II for a complete listing. The deployment of units is depicted in Figure 6.

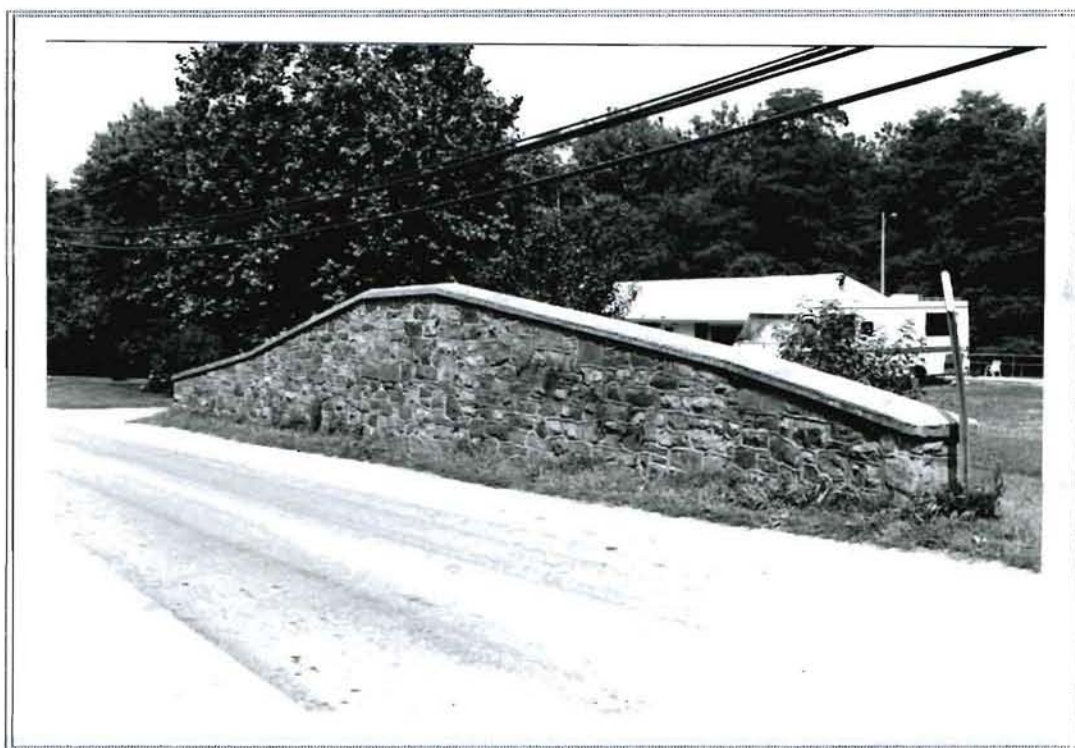
The archaeological and architectural elements of this site do not constitute cultural resources. Additional work is not recommended.

3) Thompson Property: Site 7NC-A-82 (prehistoric and historic)

Project Plan: Sheet 18
Location: Station Number 82
Owner: Clara Smith

This property lies in the southeast corner of Valley and Evanson Roads. A total of 73 posthole shovel tests were excavated in this location, along with two (2) excavation units (2½ X 5 feet each). The deployment of units is depicted in Figure 7.

Plate 6: The Wingwall



Looking East across Valley Road

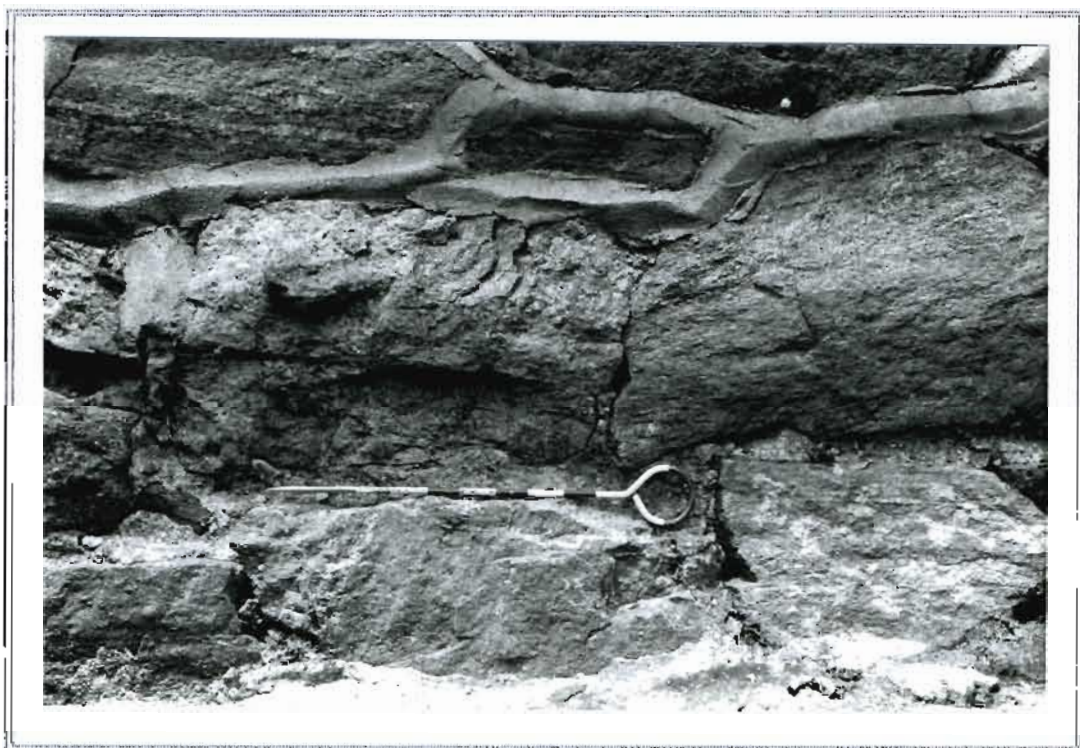
Plate 7: Detail of Wingwall



Looking West

Note concrete cap and shaped mortar joints. An earthen ramp, now removed, rose to the elevation of the rock ledge at the foot of the wall. The house in background is on the northwest side of Valley Road, opposite the Wingwall.

Plate 8: Detail of Wingwall



Note shaped mortar joints above ramp grade.

Plate 9: Collapsed Barn Wall, Exposed in Cut



Agricultural artifacts on tarpaulin were discovered nearby.

Plate 10: Detail of Collapsed Barn Wall



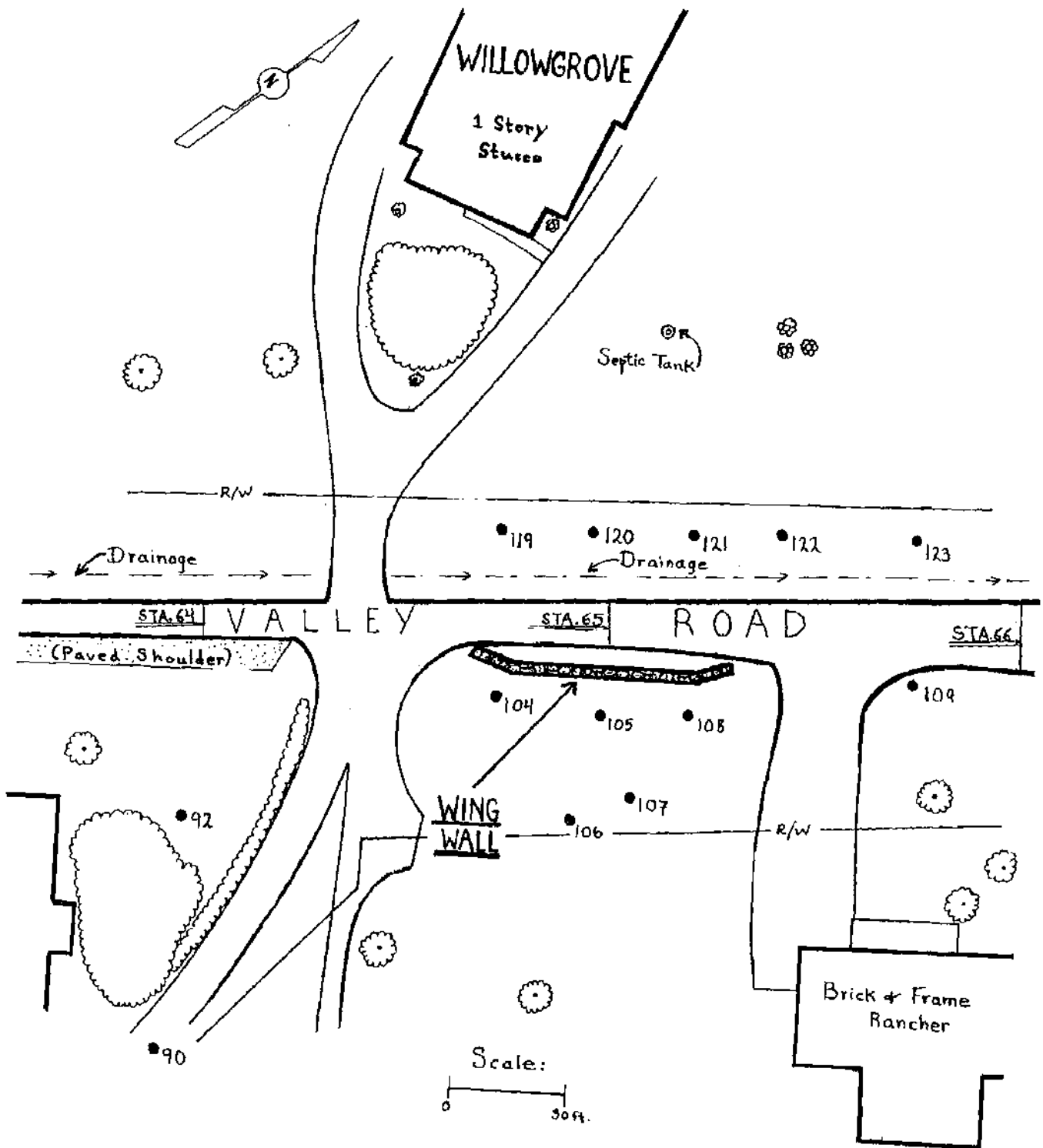
Surveyor's chaining pin gives scale

Plate 11: Artifacts from the Barn Site



Items on tarpaulin include a plowshare, broken pitchfork, three pieces of lightning rod strap, cast iron pipe fragment, cultivator shovel, harrow spike, shovel blade (lacking ferrule and handle), machine bolt, and lug wrench. Surveyor's chaining pin gives scale.

Figure 6: Plan of Testing at 7NC-A-81



Prehistoric artifacts, found only in the plowzone, comprise a few flakes of chert, quartz and jasper as well as a few ceramic sherds of late prehistoric age (ca. A.D. 1000-1500). Posthole shovel testing produced 3 quartz flake fragments, one early-stage flake fragment of jasper, and one small fabric-impressed sherd (Riggins or Minguannan).

Excavation Unit 1 yielded 16 artifacts. These finds include 4 quartz flake fragments, 2 quartz reduction fragments, 2 pieces of thermally-altered quartz, 3 quartz or schist fragments, and 1 quartz core tool fragment. One thinning flake of Newark jasper was found. Three small late prehistoric sherds were recovered. Two are fabric-impressed and one is decorated with finely-incised lines over a smoothed surface.

The characteristics of paste, temper, surface finish, and decoration make the chronological assessment of the sherds quite secure. The largest sherds do not exceed 1 cm² in surface area. The subsoil, very compact and loamy, contained no artifacts or features.

The historic component of the site is represented by a foundation consisting of schist, quartz, sandstone laid up with a sandy mortar. The structure appears to have been burned and demolished. Very few artifacts were found during testing, mostly modern domestic debris (glass fragments and food-service ceramics, ca. 1940-1960). Most of these artifacts were not collected or quantified. Typical examples appear in the artifact inventory (Appendix II). Structural rubble, also modern in type and material, was frequently detected. The most outstanding element of the historic component is a WWI-vintage Farmall tractor.

Due to the paucity of the finds and the complete lack of remains in undisturbed contexts, this site is not recommended for further work.

Plate 12: Thompson House Site, Abandoned Farmall Tractor



Plate 13: Thompson House Site, Partially Exposed Foundation



Spade gives scale

Plate 14: Thompson House Site, Prehistoric Site



General View toward Southeast

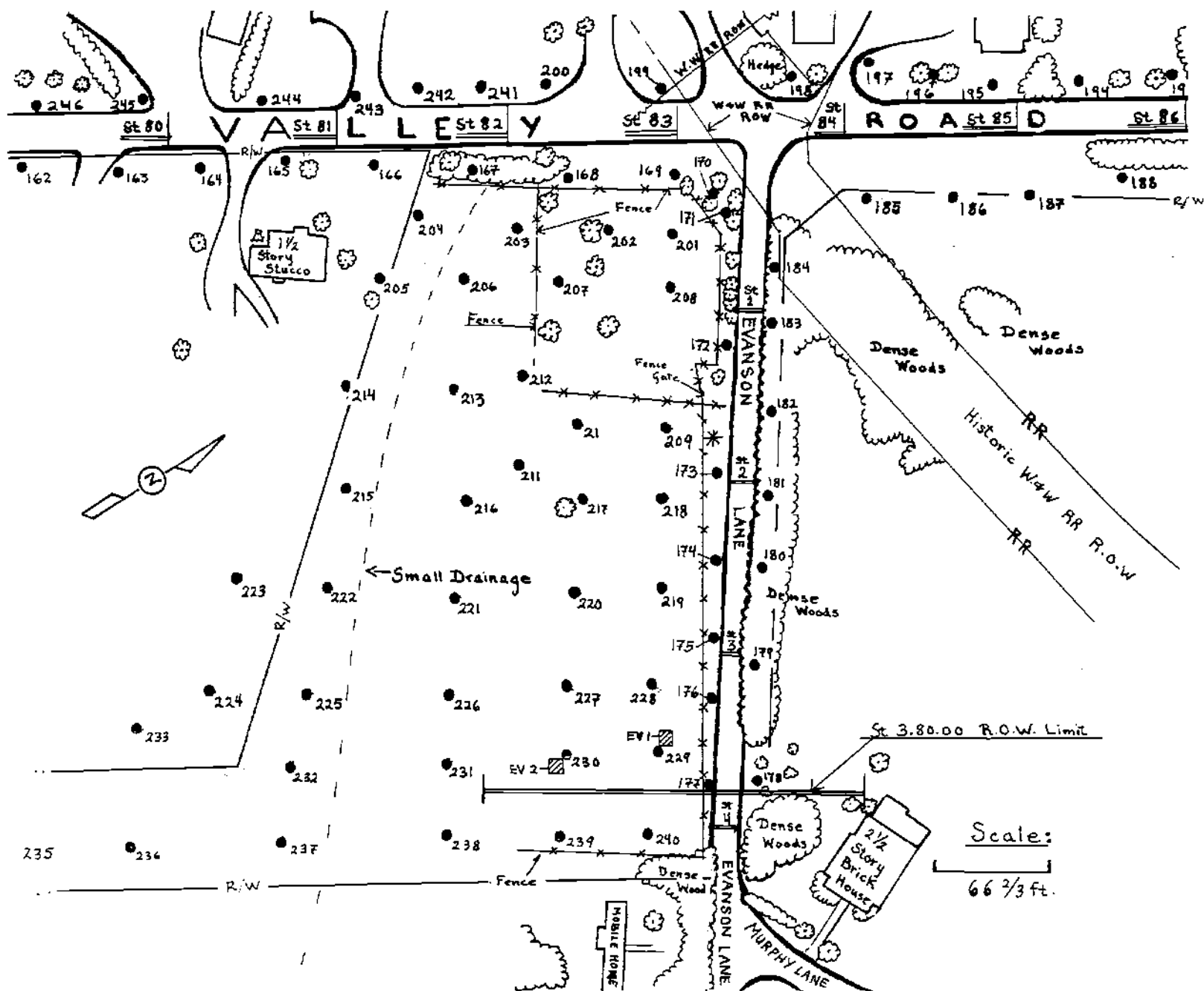
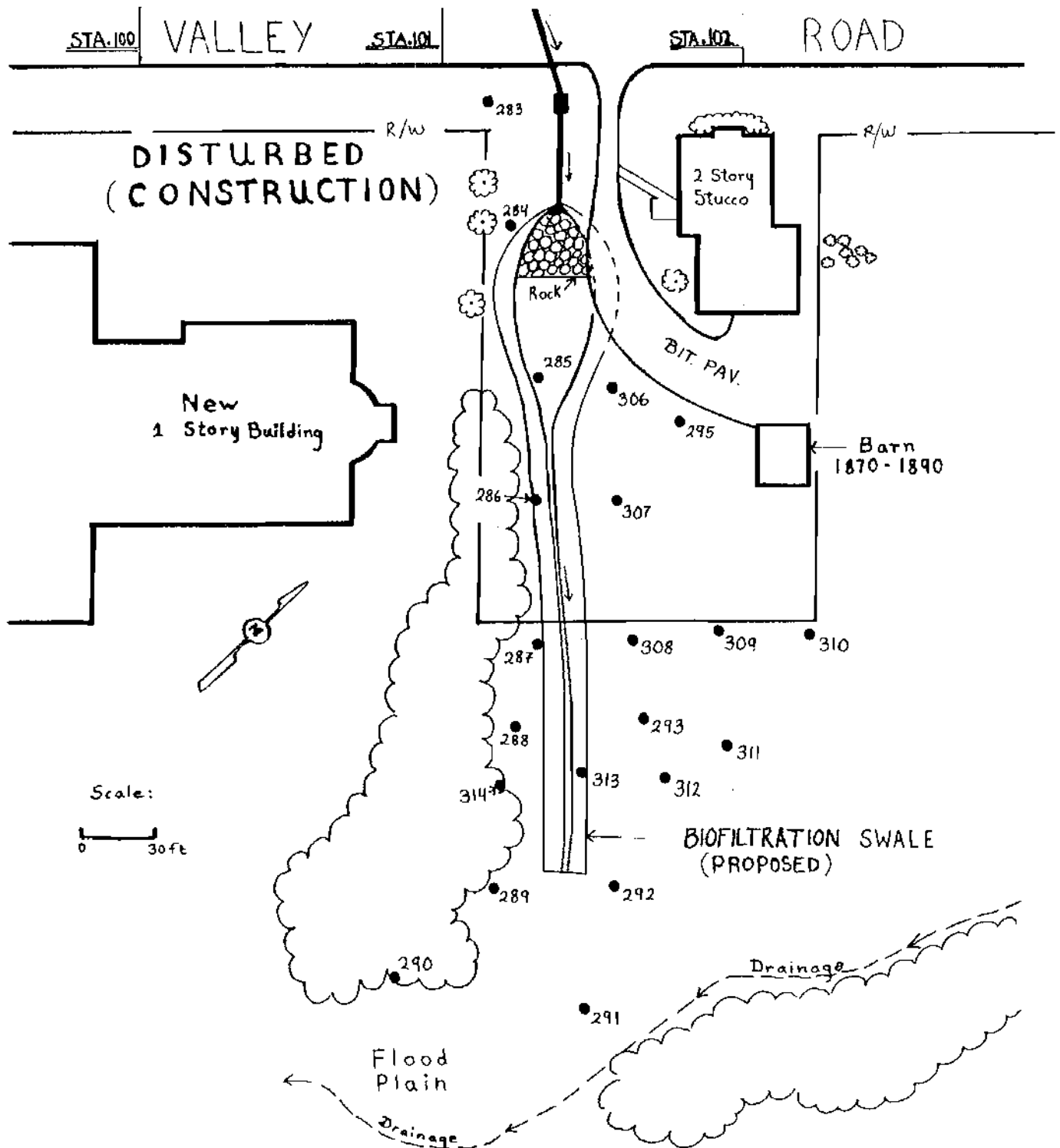


Figure 7: Plan of Testing at 7NC-A-82

Figure 8: Plan of Testing at 7NC-A-3 (Locus B)



4) Prehistoric Site (7NC-A-3, Locus B)

Project Plan: Sheet 21
Location: Station Number 102
Owner: Joseph and Elsie Kelly

This property includes a standing structure which will be removed prior to the proposed road widening. The structure has no historic merit (Kise, Franks and Straw 1991). Prehistoric artifacts, including several bifaces, were reportedly found in this vicinity about 1955. The original finds occurred on the east side of a small stream that feeds Mill Creek. Locus B, identified in the present study, is on the west side of the stream. In the current work, a total of 22 posthole shovel tests were excavated at intervals of 25± feet (Fig. 8). Prehistoric artifacts, found only in the plowzone, comprise 4 pieces of thermally-altered quartz or quartzite and 5 pieces of quartz debitage. One reduction fragment of schist and one late-stage flake of quartzite were also found. No hint of formal or culturally diagnostic artifacts was observed. The subsoil, very compact and loamy, contained no artifacts or features. Additional work is not recommended.

All other portions of the project alignment were found to have severely disturbed earth and/or a dearth of cultural remains. Except as noted, no additional archaeological services are recommended.

Considerations of Significance

The following are the criteria established by the Secretary of the Interior for use in evaluating and determining the eligibility of properties for listing upon the National Register of Historic Places. Properties listed upon the Register or found to be eligible for listing are considered to have significance as cultural resources. The criteria for evaluation are included in this document for information purposes.

National Register Criteria for Evaluation (36 CFR Part 60.4).

"The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- " (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- " (b) That are associated with the lives of persons significant in our past; or
- " (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- " (d) That have yielded, or may be likely to yield information important in prehistory or history...."

Criteria (a) and (b) pertain to locations whose value derives primarily from association with historical events or famous personages, and Criterion (c) relates to architectural entities. Criterion (d) pertains to archaeological sites that have a potential to inform substantively upon questions of archaeology or history, particularly if archaeological investigation is the primary or only means of realizing the potential gain. Obviously, substantive contributions to knowledge from archaeological investigations require both a viable theoretical framework and the survival of cultural data under conditions that would make their collection and interpretation intelligible. Archaeological situations lacking in either or both of these requisites are unlikely to hold much promise for increasing knowledge about past human behaviors.

For better or worse, the field conditions along most of the project alignment reflect a history of disturbance from a variety of sources; land-

clearing, farming, building construction and demolition, and so forth. These disturbances have scattered and fragmented the archaeological remains to the point that additional research is unlikely to be rewarded by a substantive gain in either data or information. This condition holds true for the Wingwall/Stone Barn (7-NC-A-81), the Thompson House (7-NC-A-82), the prehistoric site at 7-NC-A-3 (Locus B), and the prehistoric component at the Springer House (7-NC-A-80).

All of the grounds at the Springer House show intensive disturbances sufficient to rule out the probability that archaeological deposits have survived intact. However, based upon observations at similar sites in New Jersey (Mounier 1982, 1993), it is considered likely that archaeological deposits -- predating or coeval with the construction of the Springer House -- will be found sealed beneath a late 19th-century addition as well as beneath the original cellar floor pavement. This prediction is subject to validation, without which no warrant can be given that significant archaeological deposits are present. Because the house was occupied at the time of the present research, the locations of special interest could not be properly explored. In this sense, the evaluation of the Springer House as a cultural resource remains problematical. Additional testing of the indicated spaces should be conducted once the property has been vacated. The results of that testing would confirm or disallow the claim of significance for the site.

Summary and Conclusions

A Phase I/II Cultural Resource Survey undertaken in 1993 for the Delaware Department of Transportation (DelDOT). The project area included all locations subject to effects from proposed improvements to Valley Road (C.R. 294) between Route 7 (Limestone Road) and Route 41 (Old Lancaster Pike). Proposed road

improvements include the creation of wider travel lanes, shoulders, drainage features, and stormwater management areas.

The survey entailed documentary research, fieldwork, laboratory procedures, and reporting. The results of the investigation demonstrate occupation in the locale from aboriginal times to the present. Sampling involved the excavation of 329 test units (each about 12" in diameter) and 6 excavation units (of various size between 2½ x 5 feet and 5 x 5 feet). Fieldwork shows that most of the project area -- including locations that contain cultural remains -- has been disturbed by various perturbing agencies.

Four locations merited detailed examination at the Phase II level of survey. These locations include the Springer House (7NC-A-80), the Thompson House (7NC-A-82), Site 7NC-A-3 (Locus B), and the Wingwall/Stone Barn Site (7NC-A-81). Both the Springer House and the Thompson House have prehistoric as well as historic components. The Wingwall/Stone Barn site is part of a former agricultural complex, now demolished. The historic components date between the middle of the last century and the present. Site 7NC-A-3 (Locus B) is an extension of a previously identified prehistoric site.

The results of fieldwork demonstrate that none of the sites contain significant cultural resources within the locations subject to evaluation. At the Springer House, there remains a potential for archaeological materials and data to survive beneath the building, in locations that were inaccessible at the time of the this survey. Additional investigation to identify and evaluate such remains as might be present there is recommended. Elsewhere, no further work is required.

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